

ABSTRACT OF THE DISCLOSURE

When a bonded substrate stack prepared by bonding a first substrate in which a single-crystal Si layer is formed 5 on a porous layer, and an insulating layer is formed on the single-crystal Si layer to a second substrate is to be separated at the porous layer, serrate defects at the peripheral portion of the separated substrates are prevented. A fluid is ejected from an ejection nozzle (112) 10 and injected into the porous layer of a bonded substrate stack (30) while rotating the bonded substrate stack (30) about an axis (C) in a direction (R), thereby separating the bonded substrate stack (30) into two substrates at the porous layer. When the peripheral portion of the bonded 15 substrate stack (30) is to be separated, the ejection nozzle (112) is located within a range (B).